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1**S** : 10056 - 1982

# Indian Standard

# SPECIFICATION FOR SILK (VISCOSE RAYON) RIBBON TAPE

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INDIAN STANDARDS INSTITUTION
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NEW DELHI 110002

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# AMENDMENT NO. 1 DECEMBER 1992 TO IS 10056: 1982 SPECIFICATION FOR SILK (VISCOSE— RAYON) RIBBON TAPE

( Page 3, clause 3.2, Mass ) — Substitute the value '165 g/20 m  $\pm$  5 percent' for '8.5  $\pm$  0.5 g/m'.

(TX 12)

Reprography Unit, BIS, New Delhi, India

# Indian Standard SPECIFICATION FOR SILK (VISCOSE RAYON) RIBBON TAPE

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# Indian Standard

# SPECIFICATION FOR SILK (VISCOSE RAYON) RIBBON TAPE

### 0. FOREWORD

- 0.1 This Indian Standard was adopted by the Indian Standards Institution on 11 January 1982, after the draft finalized by the Narrow Fabrics, Webbings and Braids Sectional Committee had been approved by the Textile Division Council.
- 0.2 This standard is based on IND/TC 4470 Silk Tape, POORVI STAR, issued by the Ministry of Defence, Government of India. Ribbons covered by this standard are used for suspending POORVI STAR awarded to the personnel of all the three services both in full and ordinary mounting and to wear on the metal bar.
- 0.3 The Standards of Weights and Measures Act, 1976 stipulates the use of International System of Units in the country; in order to familiarize the industry with this system, the recommended SI units for use in the textile industry are given in Appendix A.
- 0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard

#### 1. SCOPE

1.1 This standard covers 33-mm width silk (viscose rayon) ribbon tape with prominent west rib effect and with coloured stripe details as specified in the contract or order.

NOTE — For Defence supplies, three equal warp stripes are of Green, Golden Yellow and Green colours

2. Yarn — Multifilament viscose rayon yarn of 165 tex dyed in Green† and Golden Yellow† colours for warp and of 16.5 tex × 3 dyed in Green† for weft.

<sup>\*</sup>Rules for rounding off numerical values (revised).

<sup>†</sup>For Defence supplies only

## 3. REQUIREMENTS

- 3.1 The tape shall be free from spinning, weaving and dyeing defects.
- **3.2** The silk (viscose rayon) ribbon tape shall comply with the following requirements

		Method of test
Length of roll, Min	50 or 100 m as specified in contract or order	
Total width	$\begin{array}{c} 33 + 0 \\ -1 \end{array}$	IS:1954-1969†
*Stripe width	$11.0 \stackrel{+ 0}{- 0}_{3} \text{ mm}$	
Ends in total width	270, Min	
Ends in each stripe	90, Mm	IS:1963-1981;
Picks/cm	18, Min	
Mass	$8.5\pm0.5~\mathrm{g/m}$	IS: 1964-1970§ ( on 10 m sample basis )
Breaking strength (full width $\times$ 20 cm) at 450 mm/min rate	420 N (43 kgf), Mm	IS: 1969-1968

- 3.3 Stripes Well defined and free from stains
- 3.4 Selvedges Straight providing firm texture to the ribbon tape.
- 3.5 Finish In respect of colour, appearance and workmanship, the ribbon tape shall not be inferior to the sealed sample agreed to in the contract or order.

<sup>\*</sup>For Defence supplies, the variation in the width of the strips in the lot shall not exceed 0 1 mm

<sup>†</sup>Methods for determination of length and width of fabrics (first revision).

<sup>‡</sup>Methods for determination of threads per unit length in woven fabrics (second revision).

Methods for determination of weight per square metre and weight per linear metre for fabrics (first revision).

<sup>||</sup>Method for determination of breaking load and elongation at break of woven textile fabrics (first revision)

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3.6	Colour Fastness Rating		Method of Test	
	Light	5 or better	IS: 2454-1967*	
	Water	4 or better	IS: 767-1956†	
	Perspiration	4 or better	IS: 971-1956‡	

Note — Carbon-arc lamp may be used in place of xenon lamp for determining colour fastness to light, if so specified in the contract or order.

### 4. PACKING

4.1 Individual rolls wrapped in 40 µm thick polyethylene film (see IS: 2508-1977§) or water-proof packing paper (see IS: 1398-1968||) shall be supplied loose or packed as detailed in the contract or order.

#### 5. MARKING

- 5.1 Each roll shall bear a label marked with name or trade-mark of manufacturer, nomenclature of the ribbon tape, length (m) and mass (g).
  - 5.1.1 Each roll may also be marked with the ISI Certification Mark.

Note—The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-d-fined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

5.2 Each package containing rolls of ribbon tape shall be marked with the details of the consignment as specified in the contract or order.

## 6. SAMPLING AND INSPECTION

6.1 As specified in the contract or order.

Note — For selecting a suitable single, double or multiple sampling plan, IS: 2500 (Part I)-1973¶ may be referred Generally an AQL of 4 percent is followed in the textile stores.

<sup>\*</sup>Method for determination of colour fastness of textile materials to artificial light (xenon lamp)

<sup>†</sup>Method for determination of colour fastness of textile materials to water.

<sup>†</sup>Method for determination of colour fastness of textile materials to perspiration.

Specification for low density polyethylene films ( first revision ).

<sup>[</sup>Specification for packing paper, waterproof, bitumen-laminated (first revision).

<sup>¶</sup>Sampling inspection tables: Part I Inspection by attributes and by count of defects (first revision).

# APPENDIX A

(Clause 0.3)

## RECOMMENDED SI UNITS FOR TEXTILES

Sl Na		SI Unit		Application	
310	•	Unit	Abbreviation	•	
(1)	(2)	(3)	(4)	(5)	
1,	Length	Millimetre Millimetre, centimetre	mm mm, cm	Fibres Samples, test specimens (as appropriate)	
		Metre	m	Yarns, ropes, cordage, fabrics	
2.	Width	Millimetre	$\mathbf{m}\mathbf{m}$	Narrow fabrics	
		Centimetre	cm	Other fabrics	
		Millimetre, centimetre	mm, cm	Samples, test specimens (as appropriate)	
		Centimetre, metre	em, m	Carpets, druggets, DURRIES (as appropriate)	
3.	Thickness	Micrometre ( micron )	μm	Delicate fabrics	
		Millimetre	mm	Other fabrics, carpets, felts	
4.	Linear density	Tex	tex	Yarns	
		Millitex	mtex	Fibres	
		Decitex	dtex	Filaments, filament yarns	
		Kilotex	ktex	Slivers, ropes, cordage	
5.	Diameter	Micrometre ( micron )	μm	Fibres	
		Millimetre	mm	Yarns, ropes, cordage	

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Sl Characteristic		SI Unit		Application	
$\mathcal{N}_{o}$	•	Unit	Abbreviation		
(1)	(2)	<b>(</b> 3)	(4)	(5)	
6.	Circumference	Millimetre	mm	Ropes, cordage	
7.	Threads in fabric:			Woven fabrics ( as appropriate )	
	a) Lengthwise	Number per	ends/cm		
		centimetre Number per decimetre	ends/dm		
	b) Wadthwise	Number per centimetre	picks/cm		
		Number per decimetre	picks/dm		
8.	Warp threads in loom	Number per centimetre	ends/cm	Reeds	
9.	Stitches in knitted fabric	÷.		Knitted fabrics (as appropriate)	
	a) Lengthwise	Courses per	courses/cm		
		Courses per decimetre	courses/dm		
	b) Widthwise	Wales per centimetre	wales/cm		
		Wales per decimetre	wales/dm		
10	Statch length	Millimetre	mm	Knitted fabrics, made-up itmes	
11.	Mass per unit area	Grams per square metre	$\mathbf{g}/\mathbf{m}^2$	Fabrics	
12.	Mass per unit length	Grams per metre	g/m	Fabrics	

Sl Characteristic No.		SI Unit		Application	
JYU	•	Unit	Abbreviation		
(1)	(2)	(3)	(4)	(5)	
13.	Twist	Turns per centimetre	turns/cm	Yarns, ropes, cordage (as appropriate)	
		Turns per metre	turns/m	appropriate j	
14.	Test or gauge length	Millimetre, centimetre	mm, cm	Fibre, yarn and fabric specimens (as appropriate)	
15.	Breaking load	Mıllinewton	mN .	Fibres, delicate, yarns (indivi- dual or skeins)	
		Newton	N	Strong yarns (individual or skeins), ropes, cordage, fabrics	
16.	Breaking length	Kilometre	km	Yarns	
17.	Tenacity	Millinewton per tex	$\mathbf{m}\mathbf{N}_i$ 'te $\mathbf{x}$	Fibres, yarns (individual or skeins)	
18.	Twist factor or twist multi- plier	Turns per centimetre × square root of tex	$\frac{\operatorname{turns/cm}}{\checkmark \sqrt{\operatorname{tex}}}$	Yarns (as appro-	
		Turns per metre × square root of tex	$\frac{turns/m}{x\sqrt{tex}}$	priate)	
19.	Bursting strength	Newton per square centimetre	N/cm²	Fabrics	

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Sl No.	Characteristic	SI Unit		Application
JVO.		Unit	Abbreviation	
(1)	(2)	(3)	(4)	(5)
20.	Tear strength	Millinewton, newton	mN, N	Fabrics (as appropriate)
21.	Pile height	Millimetre	mm	Carpets
<b>2</b> 2.	Pile density	Mass of pile yarn in grams per s q u a r e metre per millimetre pile height	g/m²/mm pile height	Pile carpets
23.	Elastic modulus	Millinewton per tex per unit deformation	mN/tex/unit deforma- tion	Fibres, yarns, strands

## INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

## Base Units

QUANTITY	Unit	Symbol	
Length	metre	m	
Mass	kilogram	kg	
Time	second	9	
Electric current	ampere	Α	
Thermodynamic temperature	kelvin.	K	
Luminous intensity	candela	cd	
Amount of substance	mole	mol	
Supplementary Units			
QUANTITY	Unit	Symbol	
Plane angle	radiin	rad	
Solid angle	steradian	sr	
Derived Units			
QUANTITY	Unit	Symbol	DEFINITION
Force	newton	N	$1 N = 1 \text{ kg.m/s}^3$
Energy	joale	J	1 J = 1 N.m
Power	watt	W	1 W == 1 J/∎
Flux	weber	Wb	1 Wb == 1 V.s
Flux density	tesla	T	1 T = 1,W₩
Frequency	hertz	Hz	1 Hz 🛶 🕽 🥒
Electric conductance	5161116112	5	1 S 🛥
Electromotive force	volt	v	1 V 🏚 😭
Pressure, stress	pascal	Pa	l Pa

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